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10/002,805	12/03/2001	Von K. McConnell	1704	3821

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EXAMINER

AFSHAR, KAMRAN

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,805

Applicant(s)

MCCONNELL ET AL

Examiner

Kamran Afshar, 703-305-7373

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/3/01.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2,4,8.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 5, 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng (U.S. Patent 6,240,287 B1).

With respect to claims 1, 25, Cheng discloses a method of controlling capacity (i.e. overloaded or congested, traffic volume) in a communication system (See e.g. title, Abstract), comprising: receiving a request to establish a communication session (i.e. call processing) between a plurality of subscribers (i. e. users); making a determination that more than a threshold number of the subscribers are (See e.g. Co. 1, Lines 6 – Co. 2, Line 3) inherently located in a common location / zone (See i.e. Co. 1, Lines 25-27, cell / cell-sector / base station coverage area, overlapping coverage area, handoff region, service area,

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etc.); and responsive to the determination, barring (i.e. restriction, terminating, blocking, rejecting, denying, dropping, preventing call) at least one of the subscribers located in the common zone from participating in the session (See e.g. Co. 2, Lines 4-15).

Regarding claim 5, Cheng discloses at least one of the subscribers is a mobile Subscriber (See e.g. Co. 3, Lines 28-30, Co. 4, Lines 5-9).

3. Claims 1-2, 4-7, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomoike (U.S. Patent 5,790,955).

With respect to claims 1, 7, 25, Tomoike discloses a method of controlling capacity (i.e. overloaded or congested, traffic volume) in a communication system (See e.g. title, Abstract), comprising: receiving a request to establish a communication session (i.e. call processing) between a plurality of subscribers (See e. g. a group of the mobile 11, 12, 21 of Fig. 1); making a determination that more than a threshold number of the subscribers are (See e.g. Co. 1, Lines 40-48) inherently located in a common location / zone (See e.g. Co. 1, Lines 40-48, given service area, cell / cell-sector / base station coverage area, overlapping coverage area, handoff region, service area, etc.); and responsive to the determination, barring (i.e. restriction, terminating, blocking, rejecting, denying, dropping, preventing call) at least one of the subscribers located in the common zone (See e. g. mobile stations 11, 12, in service area of 1 or 2 of Fig. 1); from participating in the session (See e.g. Co. 2, Lines 20-45).

Regarding claim 2, Tomoike discloses the threshold number of subscribers is T subscribers (i.e. a'), and wherein making a determination that more than (i.e. exceeded the threshold) the threshold number of the subscribers are located in a common zone comprises: determining where each of the subscribers is located; and determining that N of the subscribers are located in the common zone, wherein N is more than T (See e.g. thresholds a', b', Co. 3, Lines 49-67).

Regarding claim 4, Tomoike discloses the common zone is a zone selected from the group consisting of (i) a geographic area, (ii) a cell of a cellular communication system, (iii) a sector of a cell of a cellular communication system, (iv) a network, (v) a sub-network, and (vi) an enclosure (See Co. 2, Line 60 – Co. 3, Line 31, service areas of 1 and 2 of Fig. 1).

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Regarding claim 5, Tomoike discloses at least one of the subscribers is a mobile Subscriber (See e. g. mobile stations 11, 12, in service area of 1 or 2 of Fig. 1).

With respect to claim 6, Tomoike discloses a method of controlling capacity (i.e. overloaded or congested, traffic volume) in a communication system (See e.g. title, Abstract), comprising: receiving a request to establish a communication session (i.e. call processing) between a plurality of subscribers (See e. g. mobile stations 11, 12, 21 of Fig. 1); making a determination that X more than a threshold number of the subscribers are inherently located in a common zone (See e.g. Co. 1, Lines 40-48, cell / cell-sector / base station coverage area, overlapping coverage area, handoff region, service area, etc.); and responsive to the determination, barring (i.e. restriction, terminating, blocking, rejecting, denying, dropping, preventing call) the X more subscribers from participating in the session (See e.g. Co. 2, Lines 20-45).

4. Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Chio (U.S. Patent 6,618,597 B1).

With respect to claim 24, Chio discloses a method of controlling capacity in a cellular communication system, the cellular communication system defining a number of sectors, the method comprising: allowing up to only a threshold number of mobile stations in a given sector (i.e. cell / cell-sector / base station coverage area, overlapping coverage area, handoff region, service area, etc.) to engage in a conference session with each other at any given time (See e.g. Co. 1, Lines 34-45, Co. 2, Lines 27-34); and barring (i.e. refusing, restriction, terminating, blocking, rejecting, denying, dropping, preventing call) more than that threshold number of mobile stations from participating in the conference session (See e.g. Co. 2, Lines 52-66).

5. Claims 7-18, 20, 25- 26 is rejected under 35 U.S.C. 102(e) as being anticipated by Leung (U.S. Pub. No: 2003/0087653 A1).

With respect to claims 7, 25, Leung discloses a method of controlling capacity (i.e. overloaded or congested, traffic volume) in a communication system (See e.g. Title, Abstract, Page 1, Paragraph [0009]), comprising: receiving a request to establish a communication session (i.e. call processing, group call, One-to-Many, Many-to-Many) between a plurality of subscribers (i.e. number of active users, number

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of mobile stations, or wireless apparatus); making a determination that more than a threshold number of the subscribers are (See e.g. Co. 1, Lines 40-48) inherently located in a common location / zone (See e.g. Pages 7-8 of Paragraph [0088], given service area, cell / cell-sector range, base station coverage area, overlapping coverage area, handoff region, service area, etc.); and responsive to the determination, barring (See e.g. Page 10, Paragraph [0110], i.e. restriction, terminating trigger, blocking, rejecting, denying, dropping, preventing call) at least one of the subscribers located in the common zone (See e.g. Figs. 1-2, 15A-16); from participating in the session (See Page 10, Paragraph [0111] – Page 11 [0116]).

Regarding claim 8, Leung discloses receiving a request to establish a communication session between a group of mobile subscribers comprises: receiving a session initiation request from one of the mobile subscribers, the session initiation request identifying at least one other mobile subscriber with whom to establish the communication session (See e.g. Page 6, Paragraph [0075]).

Regarding claim 9, Leung discloses receiving a request to establish a communication session between a group of mobile subscribers comprises: receiving a group session initiation request from one of the mobile subscribers, the group session initiation request representing a request to establish the communication session between the group of mobile subscribers (See e.g. Page 6, Paragraph [0075]).

Regarding claim 10, Leung discloses determining which mobile subscribers are members of the group.

Regarding claim 11, Leung discloses making a determination that the group of mobile subscribers includes more than a threshold number of mobile subscribers operating in a given service area of the wireless communication system (See e.g. Page 6, Paragraphs [0075]-[0076]), determining that a number of the mobile subscribers of the group are operating in the given service area; and determining that the number exceeds the threshold (See Page 11, Paragraphs [0113]-[0115], Fig. 16).

Regarding claim 12, Leung discloses determining, respectively for each mobile subscriber of the group, in which service area the mobile subscriber is located (See e. g. Page 6, Paragraphs [0075]-[0076]).

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Regarding claim 13, Leung discloses querying a location system, and receiving in response from the location system an indication of the service area in which the mobile subscriber is located (See e. g. Page 6, Paragraphs [0075]-[0076]).

Regarding claim 14, Leung discloses the threshold is specific to the service area, determining the threshold for the service area, by reference to a data store (See Page 11, Paragraphs [0113]-[0115], Fig. 16).

Regarding claim 15, Leung discloses setting the threshold based on a measure of load in the service area (See e.g. Page 11, Paragraph ([0115]).

Regarding claim 16, Leung discloses the wireless communication system comprises a cellular communication system, and wherein the service area is a geographic area selected from the group consisting of (i) a cell and (ii) a sector of a cell (See e.g. Page 6 Paragraphs [0075]-[0076], Pages 7-8 of Paragraph [0088]).

Regarding claim 17, Leung discloses the request to establish the communication session originates from an originating mobile subscriber, informing the originating mobile subscriber that at least one mobile subscriber has been excluded (See e.g. Page 10, Paragraph [0112], i.e. refuse, restrict, terminating, blocking, rejecting, denying, dropping, preventing call) from participating in the communication session (See e.g. Page 11, Paragraph [0113]).

Regarding claim 18, Leung discloses informing the originating mobile subscriber that at least one mobile subscriber has been excluded (See e.g. Page 10, Paragraph [0112], i.e. refuse, restrict, terminating, blocking, rejecting, denying, dropping, preventing call) from participating in the communication session comprises: sending a message to the originating mobile subscriber, the message indicating that at least one mobile subscriber has been excluded from participating in the communication session(See e.g. Page 11, Paragraph [0113]).

Regarding claim 20, Leung discloses the message identifies the at least one subscriber (See e.g. Pages 10-11, Paragraphs {0111}-[0112]).

With respect to claim 26, Leung discloses a system for controlling capacity in a communication system, the system (See e.g. Page 1, Paragraph [0009]) comprising: at least one processor (See Page 1,

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Paragraph [0011]); data storage (See Page 1, Paragraph [0011]) holding threshold data and program instructions (See Page 1, Paragraph [0011], Page 11, Paragraphs [0118]-[0120]); the threshold data indicating, for each of a plurality of service areas (See e.g. Pages 7-8 of Paragraph [0088], i.e. cell / cell-sector range, base station coverage area, overlapping coverage area, handoff region, service area, etc.), a threshold number of subscribers that are allowed (i.e. predetermined, desired, congested, active, a, the, first and / or second threshold), to engage in a communication session (i.e. call processing or group call, or One-to Many) with each other in the service area (See e.g. Page 10, Paragraph [0111]); the program instructions being executable by the at least one processor (See Page 1, Paragraph [0011], Page 11, Paragraphs [0118]-[0120]), in response to a request to establish a communication session among a group of subscribers (See e.g. Figs. 15A-16) to reference the threshold data to determine the threshold number of subscribers that are allowed to engage in a communication session with each other in a given service area (See e.g. Page 10, Paragraph [0112]); make a determination that the group of subscribers includes more than the threshold number of subscribers operating in the given service area (See e.g. Figs. 15A-16); and responsive to the determination, bar (i.e. refuse, restrict, terminating, blocking, rejecting, denying, dropping, preventing call) a sufficient number of the subscribers from participating in the session so that at most the threshold number of subscribers operating in the given service area participate in the session (See e.g. Page 11, Paragraph [0113]).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomoike (U.S. Patent 5,790,955).

Regarding claim 3, Tomoike everything as discussed above in claim 1. Further Tomoike discloses the threshold number of subscribers is T (i.e. aⁿ) subscribers, wherein the plurality of subscribers

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comprises N subscribers (i.e. b') located in the common zone (See e.g. Co. 3, Lines, and barring (i.e. restricting) at least one of the subscribers (See e.g. Co. 3, Line 49 – Co. 4, Lines 5, i.e. restricting subscribers i.e. mobile stations 11 and 12 and placing restriction X and / or Y) from participating in the session. However, Tomoike does not explicitly teach the barring (i.e. restriction or denying or preventing) subscribers calculated by $T - N = X$. In an analogous, Tomoike clearly teaches that the communication restriction control section 33 includes a usage calculation section for calculating a communication channel usage in each of the zones of the radio base stations (i.e. 41 and 42), and a comparison section for comparing the usage calculated by the usage calculation section with two (i.e. a' and b') predetermined thresholds (See e.g. Co. 3, Lines 25-30). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of to facilitate the barring (i.e. restriction or denying or preventing) subscribers from communication session (i.e. call processing) calculated by $T - N = X$ such that as the traffic in each zone as the area of each radio base station is monitored; and when the traffic rapidly increases, originating restriction is performed to prevent the channel block as suggested by Tomoike (see e.g. Co. 1, Lines 45-48).

8. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti (U.S. Patent 6,477,150 B1) in view of Chuah (U.S. Patent 6,226,277 B1).

With respect to claim 27, Maggenti discloses a service agent (See e.g. 218 (CM) of Fig. 2) coupled with a packet-switched network (See e.g. 214, "Data Packet and / or Data network" of Fig. 2, Co. 8, Lines 45-46) of the service agent (i.e. Communication Manager (CM), See e.g. Co. 4, Lines 49-59) inherently being programmed to receive a request to initiate a communication session among a group of subscribers and to responsively the group (i.e. net denotes a group of communication devices users, See e.g. Co. 4, Lines 60-) a threshold number (i.e. ten and / or 20 members in the first and second net respectively, See e.g. Co. 4, Lines 60-66) of subscribers operating in a given service area and responsive to, truncate (See e.g. Fig. 14, Co. 46, Lines 15-23) the group to include number of subscribers operating in the given service area (See e.g. Co. 5, Lines 25-45). However, Maggenti did not explicitly teach determination that the group includes more than a threshold number of subscribers operating in a given service area. In the same field of endeavor, Chuah clearly teaches a method for controlling admission of

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remote hosts to a base station in a wireless communications network based on usage priority, there are at least two user priority classes and the base station admits a threshold number of remote hosts of the lower priority class and a maximum total number of remote hosts 9See e.g. Title, Abstract, Co. 4, Lines 62-65). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Chuah to Maggenti for admitting any new connection request if the total (i.e. threshold) number of connections admitted is less than a maximum (i.e. threshold) number of users as suggested by Chuah (See e.g. Co. 4, Lines 62-65).

Regarding claim 28, Maggenti discloses the service agent comprises a SIP proxy server (See e.g. Fig. 6, Co.15, Lines 5-19), the service agent receiving the request as a SIP INVITE request (See e.g. Co. 15, Lines 47-56 & Fig. 7).

Regarding claim 29, Maggenti discloses the service agent receives the request from a given subscriber (See e.g. Co. 15, Lines 47-56 & Fig. 7), the service agent being further programmed to send to the given subscriber a message indicating that the group has been truncated (See e.g. Co. 46, Lines 15-23).

Regarding claim 30, Maggenti discloses the service agent sends the message to the given subscriber via HTTP (See e.g. Fig. 6, Co.15, Lines 5-19, Co. 19, Lines 22-26).

Regarding claim 31, Maggenti discloses the service agent is programmed to refer to subscriber priority data to determine which subscriber(s) of the group to truncate from the group (See e.g. Co. 5, Lines 25-46).

Regarding claim 32, Maggenti discloses the service agent receives the request from a given subscriber, the service agent further receiving from the given subscriber an indication of which subscriber(s) to truncate from the group (See e.g. Co. 5, Lines 25-46).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a) Karaul (U.S. Pub. No: 2002/0024943 A1), Discloses Internet Protocol Based Wireless Call Processing.

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (703) 305-7373. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, Gary, Erika A. can be reached @ (703) 308-0123. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Kamran Afshar


ERIKA GARY
PATENT EXAMINER